



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Xu, Frank Y.

App. No.: 10/784,911 GPAU: 1713

Filing Date: 02/23/2004 Examiner: Satya B. Sastri

Dkt. No.: PA115-57-03 Conf. No.: 6149

For: Materials for Imprint Lithography

INFORMATION DISCLOSURE STATEMENT

Mail Stop AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The following information is submitted in compliance with Applicants' duty of disclosure and pursuant to 37 C.F.R. § 1.56, § 1.97 and § 1.98. The undersigned brings the patents, publications, applications or other information identified in the attached:

Form(s) PTO/SB/08A and/or PTO/SB/08B or PTO/144	\boxtimes	Form(s)	PTO/SB/08A	and/or	PTO/SB/08B	or	PTO/1449
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 \square Other:

to the Examiner's attention in the above-identified application. It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed:

before the mailing date of a first Office action on the merits or before the mailing date of a first Office action after the filing of a request for continued examination under § 1.114. Therefore, no fee is believed required.

Applicants do not believe that any additional fees are due, but if the Commissioner believes additional fees are due, the

Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 502650.

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I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as either First Class Mail or Express Mail, in an envelope addressed to the Commissioner for Patents.

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Typed Name:

Date:

Katrina Prati

9-16-05

Respectfully Submitted,

Kenneth C. Brooks,

Reg. No. 38,393

IP Counsel

Legal Department

Molecular Imprints, Inc.

P.O. Box 81536

Austin, TX 78758-1536

(512) 339-7760

(512) 491-8918 (fax)

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	P E ubstitute	for form 1449A	/PTO		Complete if Known			
	2000	IFORMATIOI			APPLICATION NUMBER	10/784,911		
1	ଧ	IAIENENI	DI AFFLIC	AITI	FILING DATE	02/23/2004		
1 TE	& TRADENARY (U	se as many shee	ts as necessar	y)	FIRST NAMED INVENTOR	Xu et al.		
I		-		110	Group Art Unit	1713		
	Sheet		of	10	Examiner Name	Sastri, Satya B.		
					Attorney Docket Number	PA115-57-03		

				U.S. PATENT DOCUMEN	TS	
Examiner Initials*	Cite No.1	No.1 U.S. Patent Document Kind Code ² Number (if known)		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	η	1	т	1		(
	G1	6,316,290	B1	Wensel	11/13/2001	<u> </u>
	G2	6,541,356	B2	Fogel et al.	4/1/2003	
	G3	2004/0065252	A1	Sreenivasan et al.	4/8/2004	•
	G4	6,696,157	B1	David et al.	2/24/2004	
	G5	2004/0112862	A1	Willson et al.	6/17/2004	
	G6	6,335,149	B1	Xu et al.	1/1/2002	
	G7	6,600,207	B2	Huang et al.	7/29/2003	
	G8	5,956,216		Chou	9/21/1999	
	G9	5,820,769		Chou	10/13/1998	
	G10	6,190,929	B1	Wang et al.	2/20/2001	
	G11	5,204,381		Zeigler	4/20/1993	
	G12	6,066,269		Wei et al.	5/23/2000	
	G13	4,722,878		Watakabe et al.	2/2/1988	
	G14	2001/0044075	A1	Nishimura et al.	11/22/2001	
	G15	5,369,722		Heming et al.	11/29/1994	
	G16	6,475,704	B1	lwasaki et al.	11/5/2002	
	G17	2005/0051698	A1	Sreenivasan et al.	3/10/2005	

Examiner	Date
Signature	Considered

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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Substitute	for form 1449	A/PTO		Comp	lete if Known
	NFORMATIC STATEMENT			APPLICATION NUMBER	10/784,911
3	IAIEWENI	DI APPLI	JANI	FILING DATE	02/23/2004
(L	ıse as many she	ets as necessa	ry)	FIRST NAMED INVENTOR	Xu et al.
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Sheet	2	of	10	Examiner Name	Sastri, Satya B.
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	G18	6,132,632		Haney et al.	10/17/2000	
	G19	6,344,105	B1	Daugherty et al.	2/5/2002	
	G20	5,905,104		Eklund et al.	5/18/1999	
	G21	6,468,896	B2	Rohr et al.	10/22/2002	
	G22	6,342,097	B1	Terry et al.	1/29/2002	
	G23	5,234,793		Sebald et al.	8/10/1993	
	G24	6,174,931	B1	Moon et al.	1/6/2001	
	G25	2005/0084804	A1	Truskett et al.	4/21/2005	
	G26	2005/0100830	A1	Xu et al.	5/12/2005	
	G27	2005/0118749		Sakamoto et al.	6/2/2005	
	G28	2004/0202872	A1	Fang et al.	10/14/2004	
	G29	4,517,337		Lockhart et al.	5/14/1985	
	G30	2004/0241338	A1	Foster et al.	12/2/2004	
	G31	3,919,351		Chang et al.	11/11/1975	
	G32	4,514,439		Rounds	4/30/1985	
	G33	4,271,258		Watariguchi	6/2/1981	
	G34	4,988,274		Kenmochi	1/29/1991	

Examiner	Date		
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····	G35	6,114,404		Deeken et al.	9/5/2000	
	G36	6,583,248	B1	Bowen	6/24/2003	The state of the s
	G37	4,687,707		Matsuo et al.	8/18/1987	
	G38	5,314,731		Yoneda et al.	5/24/1994	
	G39	5,482,768		Kawasato et al.	1/9/1996	
	G40	2003/0062334	A1	Lee et al.	4/3/2003	
	G41	2005/0156357	A1	Willson et al.	7/21/2005	
	G42	2005/0160934	· A1	Xu et al.	7/28/2005	
	G43	6,932,934	B2	Choi et al.	8/23/2005	
	G44	6,849,558	B2	Schaper	2/1/2005	
	G45	6,936,194	B2	Watts	8/30/2005	

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ı	NFORMATIO	ON DISCLOSU	RE	APPLICATION NUMBER	10/784,911		
•	STATEMENT	BY APPLICA	NT	FILING DATE	02/23/2004		
				FIRST NAMED INVENTOR	Xu et al.		
(use as many she	eets as necessary)		Group Art Unit	1713		
Sheet	1 1	of I	10	Examiner Name	Sastri, Satya B.		
SHEEL	1 4	of	TO ,	Attorney Docket Number	PA115-57-03		

				FOREIGN	N PATENT DOCUMENTS			
Examiner Initials*	Cite No.1	Office 3	Foreign Patent Docui	mentBG Kind Code ⁵ (if knBown)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	т ⁶
	G46	wo	87/02935		Long et al.	5/21/1987		
	G47	JP	02192045		Mineo et al.	7/27/1990		
	G48	JP	61-40845		Matsuo et al.	2/27/1986		
	G49	JР	2-248480		Yoneda et al.	10/4/1990		
	G50	JP	3-90345		Nobuyoshi et al.	4/16/1991		
	G51	JP	9-278490		Toru et al.	10/28/1997		

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	ORMATION ATEMENT B			APPLICATION NUMBER	10/784,911
31,	ALEMICIAL D	I AFFLIC	MIT	FILING DATE	02/23/2004
(use	as many sheets	as necessary	<i>)</i>	FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	1713
Sheet	Sheet 5 of 10			Examiner Name	Sastri, Satya B.
				Attorney Docket Number	PA115-57-03

OTHER PR	OR ART	NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	G52	BLOMQUIST ET AL., Fluorinated Acrylates in making Low-Loss, Low-Birefringence, and Single-Mode Optical Waveguides with Exceptional Thermo-Optic Properties, SPIE Conference on Linear Optical Properties of Waveguides and Fibers, Vol. 3799, pp. 266 - 279 7/1/1999	
	G53	ELDADA ET AL., Robust Photopolymers for MCM, Board, and Backplane Optical Interconnects, SPIE Vol. 3288, pp. 175 - 191 1/1/1998	
	G54	ELDADA ET AL., Affordable WDM Components: The Polymer Solution, SPIE Vol. 3234, pp. 161 - 174 1/1/1998	
	G55	ELDADA ET AL., Advanced Polymer Systems for Optoelectronic Integrated Circuit Applications, SPIE Vol. 3006, pp. 344 - 361 1/1/1997	
	G56	HIRAI ET AL., Abstract of Mold Surface Treatment for Imprint Lithography, Journal of Photopolymer Science and Technology, pp 457-462, vol 14, No. 3 8/1/2001	
	G57	ROOS ET AL., Abstract of Nanoimprint Lithography with a Commercial 4 Inch Bond System for Hot Embossing, Proceedings of SPIE Vol. 4343, pp. 427-435 10/1/2001	
	G58	Sol-Gel Technology, www.chemat.com/html/solgel.html 1/14/2004	
	G59	Sol-Gel Chemistry, www.prsc/usm.edu/mauritz/solgel.html 2/2/2004	
	G60	HAKOVIRTA ET AL., Optical Properties of Fluorinated Diamond-Like Carbon Films Produced by Pulsed Glow Discharge Plasma Immersion Ion Processing, Journal of Applied Physics 88(3); pp1456-1459 8/1/2000	

Examiner Signature		Date Considered	
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OTHER PRI	IOR ART	NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	G61	APPLICATION NO. 11/027,473, naming Inventors Bailey et al., entitled Release Layer Comprising Diamond-Like Carbon (DLC) or Doped DLC with Tunable Composition for Imprint Lithography Templates and Contact Masks, filed 12/30/2004	
	G62	APPLICATION NO. 10/789,319, naming Inventors Xu et al., entitled Composition for an Etching Mask Comprising a Silicon-Containing Material, filed 2/27/2004	
	G63	APPLICATION NO. 10/948,511, naming Inventors Xu et al., entitled Polymerization Technique to Attenuate Oxygen Inhibition of Solidification of Liquids and Composition Thereof, filed 9/23/2004	
	G64	APPLICATION NO. 10/967,740, naming Inventors Xu et al., entitled Low-K Dielectric Functional Imprinting Materials, filed 10/18/2004	
	G65	APPLICATION NO. 10/919,062, naming Inventors Xu et al., entitled Composition to Provide a Lyaer with Uniform Etch Characteristics, filed 8/16/2004	
	G66	APPLICATION NO. 10/919,224, naming Inventors Xu et al., entitled Method to Provide a Layer with Uniform Etch Characteristics, filed 8/16/2004	
	G67	APPLICATION NO. 10/978,285, naming Inventors Willson et al., entitled Step and Flash Imprint Lithography, filed 10/29/2004	
	G68	APPLICATION NO. 11/062,420, naming Inventors Willson et al., entitled Step and Flash Imprint Lithography, filed 2/22/2005	
	G69	APPLICATION NO. 11/068,397, naming Inventors Xu et al., entitled Method of Providing Desirable Wetting and Release Characteristics between a Mold and a Polyerizable Composition, filed 2/28/2005	

Examiner Signature	Date Considered	·

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	G70	APPLICATION NO. 11/068,174, naming Inventors Xu et al., entitled Method to Reduce Adhesion Between a Conformable Region and a Mold, filed 2/28/2005	
	G71	Data Sheet for MAK (Methyl n-Amyl Ketone), www.sp-chem.com/fine_e 1/1/2003	
	G72	Data Sheet for gamma-Glycidoxypropyltrimethoxysilane, www.powerchemical.net/3100.htm 12/5/2003	
	G73	Silicon or Silica, www.mii.org/Minerals/photosil 3/31/2005	
	G74	Electronic Devices and Circuits, people.deas.harvard.edu/~jones/es154/lectures/lecture_2/materials/materials.html 3/31/2005	
	G75	Data Sheet for Cymel 303ULF, www.cytec.com	
	G76	Data Sheet for Cycat 4040, www.cytec.com	
	G77	International Chemical Safety Card for p-Toluenseulfonic Acid, www.itcilo.it/english/actrav/telearn/osh/ic/104154.htm 12/5/2003	
	G78	Data Sheet for p-Toluenesulfonic Acid, NIOSH Manual of Analytical Methods (NMAM), Fourth Edition	

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				Attorney Docket Number	PA115-57-03

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	G79	Data Sheet for Dow Corning Z-6018,	
	G80	Data Sheet for Methyl Amyl Ketone, www.arb.ca.gov/db/solvents/solvent_pages/Ketones-HTML/methyl_amyl.htm 3/31/2005	
	G81	GOLDEN ET AL., Designing Porous Low-k Dielectrics, www.reed-electronics.com/semiconductor/index.asp?layout=articlePrint&articleID=CA82824 4/6/2005	
	G82	PADOVANI ET AL., Chemically Bonded Porogens in Methylsilsesquioxane: I. Structure and Bonding, Journal of the Electrochemical Society, 149 (12) F161-F170 10/16/2002	
	G83	WOLF ET AL., Silicion Processing for the VLSI Era, Volume 1Process Technology, pp. 407-413 1/1/1986	
	G84	TANIGUCHI ET AL., Diamond Nanoimprint Lithography, Nanotechnology, 2002, vol. 13, no. 5, pp. 592-596(5) 1/1/2002	
	G85	KIYOHARA ET AL., Abstract of Plasma Etching of CVD Diamond Films using an ECR-type Oxygen Source, http://www.iop.org/EJ/abstract/0957-4484/10/4/304 9/26/2003	
	G86	WOLF ET AL., Silicon Processing for the VLSI Era, Volume 1Process Technology, pp. 541, 542, 544, 564, 565 1/1/1986	
	G87	Novec Fluorosurfactant FC-4432, http://multimedia.mmm.com/mws/mediawebserver.dyn?333333SQa783cMj3wMj333wyXuFiiiiH-8/4/2005	

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STATEMENT BY APPLICANT (use as many sheets as necessary)				FILING DATE	02/23/2004
				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	1713
Sheet	9	of	10	Examiner Name	Sastri, Satya B.
				Attorney Docket Number	PA115-57-03

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		Abstract of January Detact 04 040045 0/07/4000	-
	G88	Abstract of Japanese Patent 61-040845, 2/27/1986	
	G89	Abstract of Japanese Patent 02-248480, 10/4/1990	
	G90	Abstract of Japanese Patent 3-090345, 4/16/1991	
	G91	Abstract of Japanese Patent 09-278490, 10/28/1997	
	G92	Abstract of Japanese Patent 61-040845, 2/27/1986	
	G93	Abstract of Japanese Patent 02-248480, 10/4/1990	
	G94	APPLICATION NO. 11/187,406, naming Inventors Xu, entitled Composition for adhering materials together, filed 7/22/2005	
	G95	APPLICATION NO. 11/187,407, naming Inventors Xu, entitled Method for adhering materials together, filed 7/22/2005	
	G96	XU ET AL., Development of Imprint Materials for the Step and Flash Imprint Lithography Process, SPIE Microlithography Conference 2/1/2004	

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	G97	NORDQUIST ET AL., Image Placement Issues for ITO-based Step and Flash Imprint Lithography Templates, J. Vac. Sci. Technol. B, pp. 695-701 3/1/2004				
	G98	RESNICK ET AL., Release Layers for Contact and Imprint Lithography, Semiconductor International, pp. 71-80 6/1/2002				
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